



## FERTILITY, HATCHABILITY, AND GROWTH PERFORMANCE OF INDIGENOUS, SASSO AND THEIR F1 CHICKEN GENOTYPES IN ETHIOPIA

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### ABSTRACT

The aim of this study was to evaluate fertility, hatchability, and growth performance of three chicken genotypes. For the experiment, 1550 (600 of indigenous, 450 of Sasso, 500 of crossed) eggs were labelled and incubated. Relatively higher proportion of fertility was observed for the eggs collected from Sasso (89.6%) followed by crossed eggs (72.8%). Correspondingly, hatchability was higher for Sasso. Body weight was increased from 27.9 to 321.7g for indigenous, 36.8 to 431.2g for Sasso, and 32.4 to 353.4g for crossbred from Week0-7. On-farm growth performance evaluation across the three agro-ecologies was started since their 7<sup>th</sup> weeks age. Body weight performance of the indigenous and crossbred male chickens were significantly ( $p < 0.05$ ) higher in midland until Week15, however male Sasso chickens in Week15 was significantly higher in lowland. W20 body weight showed significant difference for male Sasso and crossbred chickens in different agro-ecologies. Male crossbred chickens performed significantly lower body weight in lowland (1057 g) than both midland (1270g) and highland (1204g) in Week20. Higher proportion of indigenous (22%) and Sasso (24%) birds were died in highland in between Week7-13, however higher proportion of crossbred birds were lost in lowland for same week interval. Considering the most parameters of chickens, midland agroecology is more promising for their production. This is because, better feed resources, climatic condition, and awareness of farmers how to manage their birds.

### BIOGRAPHY

Dr. Berhanu Bekele has completed his PHD at the age of 33 years from Hawassa University, Ethiopia. He is the Instructor of Bule Hora University and Research Fellow at ILR, Ethiopia. He has over 12 publications that have been cited over 14 times, and his publication h-index is 2.

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